

# Notice of Allowability

Application No.

09/611,159

Examiner

Jungwon Chang

Applicant(s)

TOMINAGA ET AL.

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview dated 11/8/04.
2. ☒ The allowed claim(s) is/are 1-5,7-11 and 13-17 now renumbered as 1-15.
3. ☒ The drawings filed on 06 July 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 9/2/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 11/8/04
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

### Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Thomas C. Basso, Reg. No. 46,541 on November 8, 2004.

2. The application has been amended as follows:

#### In claims

Claim 1 (Currently amended) An automatic address management method, comprising:

(a) establishing a fixed address for a core network portion having a predetermined interconnection;

(b) dynamically connecting a terminal network portion to said core network portion, in which an upper-lower order relation is established such that an upper order server allocates an address block to a lower order server and ~~[[a]]~~ the lower order server returns the address block to the upper order server;

(c) establishing a link to said lower order ~~lower-order~~ server contained in said terminal network portion to a segment contained in said core network portion;

(d) requesting allocation of an address block to the upper order server supervising said segment by said lower ~~order-lower~~ order server; and

(e) distributing the address block in said terminal network portion through said lower order server wherein the address block is distributed to said lower order server in said terminal portion in accordance with DNCP (Dynamic Network Configuration Protocol).

Claim 6 (Canceled)

Claim 7 (Currently amended) A router system for a network comprising:

a core network portion with fixed addresses, having a predetermined interconnection to said network;

a terminal network portion with dynamic addresses, dynamically connected to said core network portion, in which an upper-lower order relation is established such that an upper order server allocates an address block to a lower order server and the lower order server returns the address block to the upper order server; and

a router, functioning as a lower order server for said terminal network portion; said router comprising:

(a) connection means through which the lower order server communicates to a segment contained in said core network portion;

(b) address acquisition means in which said lower order server requests allocation of an address block to an upper order server supervising said segment; and

(c) address distribution means in which said lower order server distributes an address block in said terminal network portion wherein said address distribution means

Art Unit: 2154

distributes the address block to the lower order server in said terminal portion in accordance with DNCP (Dynamic Network Configuration Protocol).

Claim 12 (Canceled)

Claim 13 (Currently amended) A computer program, furnished on a computer-readable medium, said computer program comprising:

(a) an executable step for establishing a fixed address for a core network portion with fixed addresses having a predetermined interconnection;

(b) an executable step for dynamically connecting a terminal network portion to said core network portion, in which an upper-lower order relation is established such that an upper order server allocates an address block to a lower order server and the lower order server returns the address block to the upper order server;

(c) an executable step for assuring automatic address management when said terminal network portion is connected to said core network portion, wherein the lower order server contained in said terminal network portion connects to a segment contained in said core network portion;

(d) an executable step for requesting allocation of an address block to the upper order server supervising said segment by said lower order server; and

(e) an executable step for distributing the address block in said terminal network portion wherein the address block is distributed to said lower order server in said terminal portion in accordance with DNCP (Dynamic Network Configuration Protocol).

Art Unit: 2154

Claim 17 (Currently amended) ~~TM~~ The program furnishing medium according to claim 13 wherein if, in said step (d), an upper order server receiving the address block allocation request does not own a sufficient address pool, an address block allocation request is recursively issued to a further upper order server.

Claim 18 (Canceled)

### **Reasons for Allowance**

3. The following is an examiner's statement of reasons for allowance: The claimed invention provides novel use of DNCP (Dynamic Network Configuration Protocol) for dynamically allocating IP address between servers in a hierarchical structure, results in an improved IP address management based on the hierarchy which was not taught or suggested in the prior art of record.


Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWC  
November 12, 2004

 JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100